## ABSTRACT OF THE DISCLOSURE

The present invention relates to a substrate holding apparatus for holding a substrate to be polished and pressing the substrate against a polishing surface. The substrate holding apparatus comprises a top ring body for holding a substrate, an elastic pad for being brought into contact with the substrate, and a support member for supporting the elastic pad. The substrate holding apparatus further comprises a contact member mounted on a lower surface of the support member and disposed in a space formed by the elastic pad and the support member. The contact member has an elastic membrane for being brought into contact with the elastic pad. A first pressure chamber is defined in the contact member, and a second pressure chamber is defined outside of the contact member. The substrate holding apparatus further comprises a fluid source for independently supplying a fluid into, or creating a vacuum in, the first pressure chamber and the second pressure chamber.

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